COMPARISON OF LABOUR FORCE, EMPLOYMENT AND INCOMES BETWEEN NEW BRUNSWICK AND MAINE

PHASE I REPORT

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APPENDIX: Detailed Exhibits

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1.0 INTRODUCTION

Phase I of our study has examined the availability of data suitable for comparison of economic activity in Maine and New Brunswick, begun preliminary data collection procedures, and preliminary analysis. This interim report describes the results of this preliminary phase, along with an outline of work which could be included in Phase II. In brief, we have found that very good, comparable data are available for most variables, with the exception of personal income.

The remainder of this interim report is organized as follows:

- An examination of the differences between the U.S. and Canadian labour force surveys which should be borne in mind when comparing data;
- A comparison of the size and age structure of the Maine and New Brunswick population;
- A comparison of labour force activity (including participation rates, employment/population ratios, employment and unemployment rates) between the Maine and New Brunswick economies;
- A comparison of the distribution of employment by industry in Maine and New Brunswick; and
- A comparison of per capita income growth in Maine and New Brunswick; and
- A description of work remaining (including both additional data collection and methods of analysis).

2.0 DIFFERENCES BETWEEN U.S. AND CANADA DATA

In 1954, the Eighth International Conference of Labour Statisticians adopted generally recognized international standards concerning the definition of unemployment. According to the definition, persons available for work in the following categories are considered to be unemployed:

i. Those whose employment contracts have been terminated or temporarily suspended and were seeking work;

ii. persons seeking work who were never previously employed or whose most recent status was other than an employee or who had been in retirement;

iii. persons who had made arrangements for work to start at a later date; and

iv. persons on temporary or indefinite layoff without pay.

The international definition excludes the following persons from the unemployed:

i. persons intending to establish a business or farm and were not actively seeking work; and

ii. formerly unpaid family workers not actively seeking work.

In 1973, the Conference further refined the definition to include as "actively seeking work" only those who had taken some measures such as registering at an employment office, filing applications with employers, awaiting results of applications, etc. It also noted that discouraged workers, or those who had not actively sought work because they believed no work to be available, should be included in the definition of unemployed.

The Organisation for Economic Cooperation and Development (OECD) has developed standardized indicators of unemployment for the seven major Western industrial countries and eight other countries. In developing the definition, it used the 1954 international definitions, which excludes discouraged workers, as a guideline.

In a paper outlining the methodology of adjustment procedures, it noted that the best method best measures of unemployment are those which are derived from a labour force survey, which attempts to determine the reasons why people are not at work and whether they have actively sought employment. Both Canada and the United States labour force data are based on surveys, and thus represent good sources of data on labour force activity. The U.S. survey covers 65,000 households and the Canadian survey covers 56,000 households.

In examining the differences between labour force definitions and between countries, the OECD concluded in 1976 that practically no adjustment to conform to international standards is required of either the U.S. or Canadian surveys. The OECD standardized unemployment rates for these two countries are compared with the official unemployment rates from the two labour force surveys in Exhibit 1.1. As the Exhibit shows, the standardized unemployment rates of the two countries are within 0.2 percent of the official rates for each year since 1976. For each country, the standardized rate tends to be slightly lower than the official rate.

There are many similarities between the labour force surveys of the two countries. Both are household surveys, both use effectively identical definitions of employment, labour force, unemployment, etc., and both cover the civilian non-institutional population. (The U.S. also publishes a series which includes military personnel in its calculation.)

EXHIBIT 1.1: U.S. and Canadian Unemployment Rates

Year	-- Unstandardized --		-- Standardized --		-- Difference --	
	U.S.	Canada	U.S.	Canada	U.S.	Canada
1983	9.7%	11.0%	9.5%	10.9%	0.2%	0.1%
1982	7.6%	7.5%	7.5%	7.5%	0.1%	0.0%
1981	7.1%	7.5%	7.0%	7.5%	0.1%	0.0%
1980	5.8%	7.4%	5.7%	7.4%	0.1%	0.0%
1979	6.0%	8.3%	5.9%	8.3%	0.1%	0.0%
1978	7.0%	8.1%	6.9%	8.0%	0.1%	0.1%
1977	7.7%	7.1%	7.5%	7.1%	0.2%	0.0%
1976	8.5%	6.9%	8.3%	6.9%	0.2%	0.0%

SOURCE: Organisation for Economic Co-operation and Development, Economic Outlook; Bureau of Labour Statistics, Employment and Earnings; and Statistics Canada 71-529 Occasional

The one major difference which can be identified is the age groups used in the two surveys. The U.S. survey includes persons 16 years of age or over, while the Canadian survey includes persons 15 years of age and over.

Statistics Canada compared U.S. and Canadian unemployment rates in a feature article "Unemployment Trends in Canada and the United States: 1975-1983". It used unpublished Canadian labour force survey data to calculate Canadian unemployment rates according to the U.S. definitions.

According to unpublished data, the unemployment rate for Canadian 15-year-olds is higher than that of the population as a whole but lower than the rate for the 16 to 20 age group. It found that the effect of including 15-year-olds in the Canadian labour force survey was to increase overall unemployment rates by up to 0.1 percent, while decreasing the unemployment rate for persons under the age of 20 by up to 0.7 percent, depending on the year. The effect of including 15-year-olds on the Canadian unemployment rate is shown in Exhibit 1.2.

EXHIBIT 1.2: Impact (Percentage Point Change) on Canadian Unemployment Rates of the Exclusion of 15 year olds - Annual Averages

	1976	1977	1978	1979	1980	1981	1982	1983
Overall rates -	+0.1	+0.1	0.0	+0.0	+0.1	0.0	+0.1	+0.1
Under age 20	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.7	-0.6
Males								
Overall rates -	0.0	+0.1	+0.1	+0.1	+0.1	+0.1	+0.1	0.0
Under age 20	-0.3	-0.3	-0.3	-0.3	-0.2	-0.3	-1.0	-0.7
Females								
Overall rates -	+0.1	0.0	0.0	+0.1	0.0	+0.1	+0.1	+0.1
Under age 20	-0.2	-0.3	-0.4	-0.2	-0.2	-0.2	-0.4	-0.3

SOURCE: "Unemployment Trends in Canada and the United States, 1975 - 1983", Statistics Canada 71-X-512

Statistics Canada further found that the difference in definitions was not a significant factor explaining the difference in trends in unemployment rates between the U.S. and Canada over the 1975 to 1983 period. The unemployment rate for youth, although higher than the average for all ages, follows the trends in general unemployment rates.

Because adjustment for the differences between Canadian and U.S. definitions would require access to confidential Statistics Canada data files, and because the OECD and Statistics Canada found

relatively little difference between official and adjusted rates, we have not attempted to adjust New Brunswick or Maine labour force data to account for these differences. The reader should be aware, however, that slight differences do exist and that the U.S. unemployment rates may be understated by approximately 0.1 percent compared to Canadian data. In any case, differences of less than 0.5 percent should not be considered significant.

3.0 POPULATION AND AGE STRUCTURE

The population of Maine is approximately 60 percent larger than the population of New Brunswick. In 1983, the U.S. Bureau of Census estimated the population of Maine to be 1.146 million, compared to Statistics Canada estimates for New Brunswick of 707,000 in that year.

The average age of the New Brunswick population is slightly lower than that of Maine. In 1983, 22.4 percent of the New Brunswick population was under the age of 5, compared to 20.1 percent for Maine. New Brunswick has 20.7 percent of its population in the 14 to 24 age group, compared to 19 percent for Maine.

New Brunswick also has relatively fewer senior citizens than Maine. Approximately 10 percent of the New Brunswick population is in the 65 and over age group, compared to 13 percent for Maine.

However, there is virtually no significant difference in the percentage of the two regions in the working age group (18 to 64). In 1983, Maine had 60.3 percent in the 18 to 64 group, compared to 60.0 percent for New Brunswick. The population within the working age group tends to be in the younger (18 to 24) age group for New Brunswick as compared to Maine. This 18 to 24 age group tends to have higher unemployment rates than the working population as a whole.

The distribution of population by age cohort for Maine and New Brunswick for the years 1976 to 1984 is found in appended Exhibits 1 through 4.

Population growth in New Brunswick has been lower than the growth in Maine population. New Brunswick population has grown at an average annual rate of 0.6 percent from 1976 to 1983, while Maine population has grown at Maine population growth averaged 1.0 percent for the 1976 to 1983 period. Both regions have had declines in the population in the under 18 age group and increases in all age cohorts over 18, particularly in the 65 and over age group.

Exhibit 3.1 compares the distribution of population by age in 1974 and 1983. Detailed population growth by age cohort is found in appended Exhibits 12 and 13.

EXHIBIT 3.1: Distribution of Population by Age Cohort, New Brunswick and Maine

Age Group	0-4	5-13	14-17	18-24	25-44	45-64	65+	Total
1976 Population (%)								
New Brunswick	8.6	17.7	8.8	13.7	24.6	17.6	9.0	100.0
Maine	7.1	15.7	8.0	12.3	24.4	20.5	12.0	100.0
1983 Population (%)								
New Brunswick	7.4	15.0	7.2	13.5	29.1	17.4	10.4	100.0
Maine	7.2	13.0	6.6	12.4	28.7	19.2	13.0	100.0
Average Annual Population Growth 1976-1983 (%)								
New Brunswick	-1.5	-1.8	-2.3	0.4	3.1	0.4	2.7	0.6
Maine	1.1	-1.7	-1.8	1.1	3.4	0.1	2.2	1.0

Source: U.S. Bureau of Census, Current Population Reports, series P-25, and Statistics Canada 91-518 and 91-210

4.0 LABOUR FORCE ACTIVITY

4.1 Labour Force Participation Rates

Labour force participation rates are lower for both sexes in New Brunswick than in Maine. In 1985, the labour force participation rate for men was 67.7 percent in New Brunswick compared to 74.1 percent in Maine. For women, the labour force participation rate was 46.3 percent in New Brunswick compared to 53.3 percent in Maine.*

As a result, the labour force of Maine is approximately 80 percent larger than the labour force of New Brunswick, while its population is only about 60 percent larger. New Brunswick had 304,000 in its labour force in 1985, compared to 552,000 for Maine. About 41 percent of the labour force in New Brunswick is female, compared to 44 percent in Maine.

Both regions have shown a steady increase in female labour force participation rates, with the exception of slight drops in a few years. The labour force participation rate for females in New Brunswick has increased almost 8 percentage points since 1975, from 38.0 percent to the present 46.3 percent. However, despite this large increase, the labour force participation rate for females has not yet reached the level it was in Maine in 1976 (47.6 percent). New Brunswick is about 10 years behind Maine in terms of female labour force participation.

The trend in male participation rates for both New Brunswick and Maine has been a decrease over the period studied. In New Brunswick, male participation rates have dropped from 70.0 percent in 1975 to 67.7 percent in 1985. In Maine, the rates dropped from 78.2 percent to 74.1 percent. Insufficient data have been

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* A very small portion of these differences may be due to the inclusion of 15-year-olds in the Canadian labour force survey.

gathered at this point to determine the primary reasons for this drop (such as economic conditions, discouraged worker effect, shifting of ages within the working aged population, additional schooling, etc.)

The relatively faster growth in labour force participation rates for females New Brunswick has led to a faster increase in the labour force since 1976. The female labour force in New Brunswick has increased at an average annual rate of 3.8 percent, compared to an increase for Maine of 2.8 percent. The average increase in male labour force is about 1.0 percent for both regions. Overall, New Brunswick's labour force has increased at a rate of 2.1 percent, compared to Maine's 1.8 percent. Average annual labour force growth is found in Exhibit 4.1.

EXHIBIT 4.1 Average Annual Growth in Labour Force, 1976-1985 (percent)

	Male	Female	Total
New Brunswick	1.0	3.8	2.1
Maine	1.0	2.8	1.8

Source: U.S. Bureau of Labour Statistics, Geographic Profile of Employment and Unemployment, Statistics Canada 71-529 Occasional and 71-001

4.2 Employment

While Maine's population is 60 percent larger than New Brunswick, it has twice as many employed persons as New Brunswick. In 1985, employment in New Brunswick stood at 258,000, compared to 522,000 for Maine. The employed/population ratio was 48.1 percent for New Brunswick and 59.7 percent for Maine. Exhibit 4.2 shows 1985 employment by sex.

EXHIBIT 4.2: Employment by Sex, 1985

Total Employment	Male	Female	Total	Employment/ Population
New Brunswick	149,000	109,000	258,000	48.1 %
Maine	289,000	233,000	522,000	59.7 %
Average Annual Growth (percent)				
New Brunswick	0.3	3.5	1.5	
Maine	1.3	3.4	2.2	

Source: U.S. Bureau of Labour Statistics, Geographic Profile of Employment and Unemployment, Statistics Canada 71-529 Occasional and 71-001

Employment growth in New Brunswick has averaged 1.4 percent over the period studied, while employment in Maine has increased at an average rate of 2.2 percent. Nearly all of the employment growth in New Brunswick since 1976 has been due to increased employment of females, with an average annual increase of 3.5 percent. Male employment growth in New Brunswick has increased at a rate of only 0.3 percent. In Maine, female employment growth rates are similar (3.4 percent) but male employment growth has averaged 1.3 percent.

Both New Brunswick and Maine experienced a recession in 1982, with decreases in the number of persons employed over 1981 levels. The decline was much more severe in New Brunswick, however, which experienced a one-year decline of 4.0 percent. Maine employment dropped by only 0.4 percent in that year.

In addition, New Brunswick did not fully recover from the recession until 1985, when employment grew by 4.0 percent. Increases in 1983 and 1984 had been modest (1.6 and 0.4 percent respectively). By contrast, Maine experienced large increases in employment in both 1983 and 1984 (3.8 and 6.1 percent respectively) although 1985 employment growth was relatively low (0.8 percent).

4.3 Unemployment

In New Brunswick, employment growth over the 1976 to 1985 period has not kept pace with labour force growth. The result has been steady increases in both unemployment and unemployment rates. In Maine, the reverse has occurred, with employment growth outpacing labour force growth.

Although the population and labour force of Maine are both significantly larger than that of New Brunswick, there are actually more persons unemployed in New Brunswick than Maine. In 1985, there were 46,000 unemployed persons in New Brunswick compared to 30,000 in Maine, over 50 percent higher. Males make up the majority of unemployed persons in New Brunswick (28,000 males vs. 18,000 females) while unemployment in Maine is evenly split between males and females.

The overall unemployment rate in 1985 was 15.2 percent in New Brunswick -- almost 10 percentage points higher than the Maine rate in that year of 5.4 percent. The rate for males was 16.0 percent in New Brunswick vs. 5.1 percent in Maine. The gap in female unemployment rates was slightly lower, or 14.2 percent vs. 5.9 percent.

EXHIBIT 4.3: 1984 Unemployment Rates by Sex, Age and Marital Status (percent)

	New Brunswick	Maine
Total	14.9	6.1
Males	15.4	6.1
Females	14.3	6.2
Youth*	25.0	16.1
20 and over	14.0	5.3
Single	21.0	9.9
Married	12.0	4.1

* In New Brunswick, 15 to 19 years of age. In Maine, 16 to 19 years of age. As noted in section 2, the effect of this difference is likely to underestimate Canadian rates for youth by 0.3 percent as compared to U.S. rates.

Source: U.S. Bureau of Labour Statistics, Geographic Profile of Employment and Unemployment, Statistics Canada 71-529 Occasional and 71-001.

Exhibit 4.3 shows the unemployment rates for 1984 according to selected population groups. (1985 data are not available in this detail). The pattern of unemployment is similar for Maine and New Brunswick, with much higher rates for youth and single people than older or married workers. Rates in New Brunswick in 1984 were as high as 25.0 percent for youth with married workers as a group having the lowest rate at 12.0 percent. In Maine, the youth unemployment rate was significantly lower (16.1 percent) and the rate for married workers was 4.1 percent.

The trend in unemployment since 1975 differs dramatically between New Brunswick and Maine. Total unemployment in New Brunswick has been increasing steadily since 1975, while unemployment in Maine has decreased in most years with the exception of the recession years 1982 and 1983. Overall, the number of people unemployed had increased at an average rate of 5.7 percent annually in New Brunswick and decreased at a rate of 3.7 percent annually in Maine. There are 65 percent more people unemployed in New Brunswick today than there were in 1976, and almost 30 percent fewer in Maine.

The gap between unemployment rates was relatively low in 1976 (11.0 percent vs. 8.9 percent). However, this gap has widened significantly since 1976. New Brunswick's unemployment rate increased to 13.2 percent in 1977, then levelled off to around 11 percent by 1981, and increased to 14.0 percent during the 1982 recession and then increased to current levels of 15.2 percent. Only in two years (1979 and 1980) did the rate drop from the previous year's level.

In Maine, the unemployment rate dropped steadily to 6.1 percent in 1978, levelled off at about 7.5 percent from 1979 to 1981, then increased to 9.0 percent in 1983 and has dropped significantly since 1983. The unemployment rate dropped from previous levels in five of the ten years studied.

Currently, the gap between unemployment rates stands at almost 10 percent (15.2 vs. 5.4 percent). Unemployment and unemployment rates by year are shown in Exhibit 4.4.

The unemployment rate for females in both regions has generally been slightly higher than the rate for males over the period studied. However, there are some exceptions. In Maine, the rate for males was slightly higher than the female rate in the recession years 1982 and 1983, possibly indicating that the recession affected males more than females. In New Brunswick, the

EXHIBIT 4.4: Unemployment and Unemployment Rates, 1976 - 1985

	Maine		New Brunswick	
	Total (000s)	Rate (%)	Total (000s)	Rate (%)
1985	30	5.4	46	15.2
1984	34	6.1	44	14.9
1983	48	9.0	43	14.8
1982	44	8.6	40	14.0
1981	37	7.2	33	11.5
1980	39	7.7	31	11.0
1979	35	7.2	30	11.1
1978	29	6.1	34	12.5
1977	39	8.4	34	13.2
1976	42	8.9	28	11.0

Source: U.S. Bureau of Labour Statistics, Geographic Profile of Employment and Unemployment, Statistics Canada 71-529 Occasional and 71-001.

pattern is similar, with the male rates climbing above the female rates in 1982. However, in New Brunswick, the male rates have remained higher than female rates, indicating that the recession pattern of unemployment has continued.

Detailed data on labour force activity (including labour force, employment, and unemployment) are found in appended Exhibits 5, 6, 14, 15, 23 and 24.

5.0 EMPLOYMENT BY INDUSTRY

The differences in employment growth rates can possibly be explained by the distribution of employment by industry. This section examines the differences between the industrial structure of the New Brunswick and Maine economies.

5.1 Manufacturing

Manufacturing accounts for 13.1 percent of New Brunswick's non-agricultural employment, compared to 23.1 percent for Maine. There are over three times as many persons employed in manufacturing in Maine than in New Brunswick (106,000 vs. 33,000). In both regions, manufacturing has declined as a percentage of overall employment since 1975, down from 16.1 percent for New Brunswick and 27.0 percent for Maine.

In New Brunswick, employment in manufacturing has dropped from 1975 levels, for an average of 0.6 percent annually. In Maine, manufacturing employment has increased slightly since 1975 at an annual rate of 1.0 percent.

5.2 Trade

Wholesale and retail trade accounts for a lower portion of non-agricultural employment in New Brunswick than in Maine. In 1985, 19.5 percent of New Brunswick's non-agricultural employees were in trade, compared to 23.6 in Maine. In 1985, there were 49,000 persons employed in trade in New Brunswick and 108,000 in Maine.

In New Brunswick, trade has become slightly less important in terms of overall employment in the period studied, while in Maine, trade has become slightly more important. Growth in trade employment in New Brunswick has averaged 1.1 percent, behind the 1.4 percent average for all non-agricultural industries. In Maine, trade employment growth has outpaced non-agricultural employment growth, at 3.7 percent compared to 2.6 percent.

5.3 Public Administration

Maine employs nearly four times as many persons in public administration than New Brunswick. In 1985, New Brunswick had 22,000 workers in that sector, compared to Maine's 86,000.

Public administration is much more important in terms of overall employment in Maine than in New Brunswick. In 1985, public administration was responsible for 18.7 percent of all non-agricultural employment in Maine and 8.8 percent of all non-agricultural employment in New Brunswick.

Overall growth in this sector since 1975 has been greater in New Brunswick, averaging 2.6 percent annually. In Maine, public administration growth has averaged only 1.4 percent. As a share of overall employment, public administration is increasing in New Brunswick but decreasing in Maine.

5.4 Services

New Brunswick had 86,000 persons imployed in the service sector in 1985. Maine had 95,000 in services in that year. This employment comprised 34.3 percent of non-agricultural employment in New Brunswick and 20.8 percent in Maine.

Both regions have had very high growth in the service sector over the 1975 to 1985 period. Service sector growth has averaged 4.0 percent in New Brunswick and 4.8 percent in Maine. As a result, services are much more important in the two economies than they were in 1975.

5.5 Transportation, Communication and Utilities

Although New Brunswick's overall non-agricultural employment is smaller than Maine's, more people in New Brunswick are employed in the transportation, communication and utilities sector than in Maine. In 1985, New Brunswick had 26,000 people employed in the sector, compared to 19,000 for Maine.

The sector is much more important as a percent of overall employment in New Brunswick. Transportation, communication and utilities is responsible for 10.4 percent of non-agricultural employment in New Brunswick and 4.2 percent in Maine.

Growth in the sector since 1975 has been modest in both economies. Average annual growth has been 0.8 to 0.9 percent over the period studied, lagging behind overall employment growth in both regions. As a result, the importance of the sector in both economies is declining.

5.6 Finance, Insurance and Real Estate

In 1985, there were 10,000 employed in finance, insurance and real estate in New Brunswick and 21,000 in Maine. This accounted for 4.0 percent and 4.6 percent of non-agricultural employment respectively.

The sector has grown faster than the overall rate in both economies, but the rate has been higher in Maine. Since 1975, the sector has averaged 2.3 percent annual growth in New Brunswick and 3.9 percent in Maine.

5.7 Construction

Construction accounted for 5.6 percent of New Brunswick employment and 5.0 percent of Maine employment in 1985. New Brunswick had 14,000 workers in the sector and Maine had 23,000.

The trend in construction employment in New Brunswick has generally been decline over the period studied. In 1975, 20,000 people were employed in New Brunswick's construction industry -- 6,000 more than 1985 levels. The average annual decrease over the 1975-1985 period is 3.5 percent.

By contrast, in Maine the general trend in construction employment has been upward, although construction employment dropped slightly in 1978 and 1979 and hit a ten-year low in 1982 and 1983. The

average increase over the 1975-1985 period for Maine was 2.1 percent, just below the average for all non-agricultural industries of 2.6 percent.

Employment by industries for New Brunswick and Maine are compared in Exhibit 5.1. Detailed employment by industy data are found in appended Exhibits 7, 8, 16, 17, 25, 26, 28 and 29.

EXHIBIT 5.1: Employment by Industry

	TOTAL EMPLOYMENT 1985 (000s)		PERCENT OF NON-AGRICULTURAL EMPLOYMENT 1985		AVERAGE ANNUAL CHANGE 1975-1985 (%)	
	New Brunswick	Maine	New Brunswick	Maine	New Brunswick	Maine
Manufacturing	33	106	13.1	23.1	(0.6)	1.0
Trade	49	108	19.5	23.6	1.1	3.7
Public Admin.	22	86	8.8	18.7	2.6	1.4
Services	86	95	34.3	20.8	4.0	4.8
Trans & Util.	26	19	10.4	4.2	0.8	0.9
Finance	10	21	4.0	4.6	2.3	3.9
Construction	14	23	5.6	5.0	(3.5)	2.1
Total	**251**	**459**	**100.0**	**100.0**	**1.4**	**2.6**

Source: U.S. Bureau of Labour Statistics, Employment and Earnings, States and Areas. 1939-78, and Supplement to Employment, Earnings, States and Areas, Data for 1980-84; Statistics Canada 71-529 Occasional and 71-001.

6.0 INCOMES

Comparisons of income estimates between New Brunswick and Maine are difficult due to the different accounting systems and estimation methods used in the two countries. The inclusion of various sources of income (transfer payments, earned income, or investment income) may vary between Canada and the United States. In addition, fluctuation of exchange rates and inflation rates vary between the two countries and further complicate the process of comparing income data. In this phase, we have not examined the comparabilty of income data.

However, it is possible at this point to compare the growth in per capita incomes (adjusted for inflation) between New Brunswick and Maine, and to compare data for the regions to national averages. These two approaches are taken in this section.

6.1 Income Growth

Real per capita personal income in New Brunswick has grown very little over the period studied. In 1975, New Brunswick's personal income per capita was $11,399 in 1985 dollars. In 1984, the figure was just slightly lower, or $11,357. Ironically, per capita income in New Brunswick hit its highest in 1982 at $12,237, when the jobs-per-capita ratio was lowest.

Maine's personal income per capita increased from $9,429 to $11,196 (1985 US $) over the same time period. Per capita incomes were almost 19 percent higher in 1984 than in 1975. Incomes rose steadily from 1975 to a peak in 1981, fell in 1982 and 1983, but have since recovered somewhat.

6.2 Incomes as a Percent of National Averages

Both New Brunswick and Maine lag behind their respective countries in terms of income per capita. However, the disparity between

New Brunswick and Canadian average income tends to be larger than that of Maine and the U.S. average.

In New Brunswick, per capita incomes in 1984 were 74.5 percent of the Canadian average. In 1975, New Brunswick incomes were 77.2 percent of the Canadian average. This percentage dropped to hit a low of 70.8 percent in 1981. The trend since 1982 has been an increase in New Brunswick incomes as a percent of Canadian incomes.

In Maine, per capita income as a percent of U.S. incomes began in 1975 slightly higher at 81.2 percent. This ratio fluctuated in the late 1970s, but has since shown an upward trend and currently stands at 84.8 percent.

The broad general conclusion is that while New Brunswick has performed somewhat worse in terms of income growth than Canada as a whole, Maine has performed somewhat better than the U.S. average.

Per capita personal income is shown in Exhibit 6.1 and in detail in appended exhibits 9, 10, 18, 19, and 20.

EXHIBIT 6.1: Per Capita Personal Income

	New Brunswick		Maine	
	Total (1)	Percent of Canadian Average	Total (2)	Percent of U.S. Average
1984	$11,357	74.5	$11,196	84.8
1983	$11,752	74.0	$10,890	85.1
1982	$12,237	72.0	$11,260	83.8
1981	$12,187	70.8	$11,858	82.0
1980	$11,771	72.9	$11,844	81.7
1979	$11,767	75.1	$11,008	77.4
1978	$11,370	74.9	$11,029	81.0
1977	$11,048	74.8	$10,760	82.6
1976	$11,273	75.3	$10,597	83.8
1975	$11,399	77.2	$9,429	81.2

(1) 1985 Canadian dollars
(2) 1985 U.S. dollars

Source: U.S. Bureau of Economic Analysis, Survey of Current Business, Statistics Canada 13-201 National Income and Expenditure Accounts

7.0 WORK REMAINING

Phase I has covered basic employment, labour force and employment data. However, a few key issues have not been addressed in Phase I. This section outlines the work which could be accomplished in Phase II of our study.

7.1 Regional Variations

Some of the differences in economic activity between New Brunswick and Maine could be explained by regional variations within the two economies. For example, northeastern Maine could have unemployment rates and employment growth patterns similar to those of southern New Brunswick, while southwestern Maine has experienced relatively high levels of employment growth due to its proximity to the urbanized core of the northeast U.S., particularly the Boston area.

However, discussions with officials at the Maine Department of Labor have indicated that labour force data are generally not available on a regional basis. The small size of the labour force survey makes regional data too unreliable to report. Labour force data for the census year only (1980) could be assembled by the Department at great cost from U.S. census data files, but it is doubtful that this could be accomplished within the budget of Phase II.

Data on employment by industry are available on a limited basis for two sub-regions of Maine. However, Statistics Canada does not report employment by industry by economic region for comparisons with regions within New Brunswick. It is possible that Statistics Canada could provide employment by industry by region through special computer runs, but again it is doubtful that this could be accomplished within the budget of Phase II.

Therefore, we suggest that no attempts be made to include regional data analysis in Phase II.

7.2 Migration Rates

The DPA Group has gathered detailed data on New Brunswick net migration by age and year from Statistics Canada. We have also requested detailed population reports (including migration) from the U.S. Census Bureau in Washington. If the data sources are found to be comparable, an comparative analysis of migration rates will be included in Phase II.

Such an analysis would examine the factors influencing net migration, such as the age structure of the population (since young adults tend to be more mobile than the population in general) and economic disparities. By dividing population growth into its various components (births, deaths, and net migration) it will be possible to better explain the differences between Maine's population growth of 1.0 percent annually and New Brunswick's 0.6 percent annually.

7.3 Labour Force Activity by Age Group

As noted in section 2, the primary difference between U.S. and Canadian labour force definitions is the inclusion of 15-year-olds in the Canadian survey. In addition, New Brunswick's higher unemployment rates may be partially due to its slightly younger population , which tends to have higher unemployment rates. The DPA Group has requested Maine unemployment data by age from Maine officials. Provided the data are comparable, Phase II will examine age-specific unemployment rates in more detail.

7.4 Comparabiliy of Income Data

We have not yet determined whether the per capita income data are comparable between countries. In Phase II, we will examine the components of the per capita personal income figures reported by

Statistics Canada and the U.S. government. It may be possible to make proper adjustments to the data so that the per capita income figures can be compared. We have already taken the first step in this process by gathering average exchange rates for the years studied.

7.5 Data Presentation

The current presentation of economic data in tabular form makes understanding of the trends over time difficult. In Phase II, we could prepare graphic presentation of key variables over time.

7.6 Further Analysis

As agreed in our letter of April 30, we have not included an analysis of the causes for these differences in our study. However, certain preliminary analyses could be included in Phase II.

First, Phase II could include a brief review of other literature comparing New Brunswick and Maine. In particular, we could examine specific issues identified in New England and Atlantic Canada: a Comparative Study by the Atlantic Provinces Economic Council as they relate to Maine and New Brunswick.

Second, we could use a shift-share type analysis to examine the components of employment growth in the two regions. Shift-share analysis divides employment growth into three components: growth related to general economic growth of the region, growth related to the strength or weakness of the mix of industries in the region, and growth related to the overall competitiveness of the region. For example, if much of the gain in New Brunswick employment has been due to the concentration of high-growth industries, this could be identified.

APPENDIX
DETAILED EXHIBITS

Exhibit 1: Maine Population by Age Cohort (thousands)

Year	Total	0-4	5-13	14-17	18-24	25-44	45-64	65+
1984	1,156	80	160	75	138	338	222	152
1983	1,146	82	149	76	142	329	220	149
1982	1,133	81	151	77	142	318	218	147
1981	1,133	80	154	81	143	311	219	144
1980	1,125	79	159	84	141	302	219	141
1979	1,097	77	156	85	139	281	224	135
1978	1,091	76	161	87	138	274	223	133
1977	1,085	76	166	87	135	269	222	130
1976	1,070	76	168	86	131	261	219	128
1975	1,059	79	171	86	128	254	217	125

Source: U.S. Bureau of Census, Current Population Reports, series P-25.

Exhibit 2: New Brunswick Population by Age Cohort (thousands)

Year	Total	0-4	5-13	14-17	18-24	25-44	45-64	65+
1983	707	52	106	51	95	206	123	74
1982	699	52	107	54	94	199	122	72
1981	696	53	108	57	93	194	122	71
1980	695	55	109	59	94	189	121	69
1979	692	56	111	60	95	183	121	67
1978	688	57	115	60	95	177	121	65
1977	684	58	117	60	94	172	120	63
1976	677	58	120	60	93	166	119	61

Source: Statistics Canada 91-518 and 91-210

Exhibit 3: Maine Population by Age Cohort (percent)

Year	0-4	5-13	14-17	18-24	25-44	45-64	65+	18-64	0-17, 65+
1984	6.9%	13.8%	6.5%	11.9%	29.2%	19.2%	13.1%	60.4%	39.6%
1983	7.2%	13.0%	6.6%	12.4%	28.7%	19.2%	13.0%	60.3%	39.7%
1982	7.1%	13.3%	6.8%	12.5%	28.1%	19.2%	13.0%	59.8%	40.2%
1981	7.1%	13.6%	7.1%	12.6%	27.4%	19.3%	12.7%	59.4%	40.6%
1980	7.0%	14.1%	7.5%	12.5%	26.8%	19.5%	12.5%	58.8%	41.2%
1979	7.0%	14.2%	7.7%	12.7%	25.6%	20.4%	12.3%	58.7%	41.3%
1978	7.0%	14.8%	8.0%	12.6%	25.1%	20.4%	12.2%	58.2%	41.8%
1977	7.0%	15.3%	8.0%	12.5%	24.8%	20.5%	12.0%	57.7%	42.3%
1976	7.1%	15.7%	8.0%	12.3%	24.4%	20.5%	12.0%	57.1%	42.9%
1975	7.5%	16.1%	8.1%	12.1%	24.0%	20.5%	11.8%	56.6%	43.4%

Source: Exhibit 1

Exhibit 4: New Brunswick Population by Age Cohort (percent)

Year	0-4	5-13	14-17	18-24	25-44	45-64	65+	18-64	0-17, 65+
1983	7.4%	15.0%	7.2%	13.5%	29.1%	17.4%	10.4%	60.0%	40.0%
1982	7.5%	15.2%	7.7%	13.4%	28.5%	17.5%	10.3%	59.3%	40.7%
1981	7.6%	15.5%	8.1%	13.4%	27.8%	17.5%	10.1%	58.7%	41.3%
1980	7.9%	15.7%	8.5%	13.5%	27.2%	17.4%	9.9%	58.1%	41.9%
1979	8.1%	16.1%	8.6%	13.7%	26.4%	17.5%	9.7%	57.6%	42.4%
1978	8.2%	16.7%	8.7%	13.8%	25.7%	17.6%	9.4%	57.0%	43.0%
1977	8.4%	17.2%	8.8%	13.8%	25.1%	17.6%	9.2%	56.5%	43.5%
1976	8.6%	17.7%	8.8%	13.7%	24.6%	17.6%	9.0%	55.9%	44.1%

Source: Exhibit 2

Exhibit 5: Maine Labour Force Participation (thousands)

Year	Labour Force			Employment			Unemployment			Unemployment Rate			Part. Rate		Employed/ Populatio
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Male	Female	
1985	552	305	247	522	289	233	30	15	15	5.4%	5.1%	5.9%	74.1%	53.3%	53.7%
1984	552	302	250	518	284	234	34	19	15	6.1%	6.1%	6.2%	73.9%	54.9%	53.8%
1983	537	300	237	488	272	216	48	27	21	9.0%	9.2%	8.8%	73.4%	53.3%	57.3%
1982	515	294	221	470	268	202	44	25	19	8.6%	8.6%	8.5%	73.1%	50.4%	56.0%
1981	509	292	217	472	272	200	37	20	17	7.2%	6.7%	7.3%	72.8%	50.0%	56.6%
1980	500	285	215	461	265	196	39	21	18	7.7%	7.2%	9.4%	73.3%	50.3%	56.7%
1979	489	282	207	454	263	191	35	19	16	7.2%	6.8%	7.7%	73.6%	49.5%	56.6%
1978	473	281	193	444	265	179	29	16	13	6.1%	5.6%	6.9%	74.3%	47.7%	56.3%
1977	470	278	192	430	257	174	39	22	18	8.4%	7.7%	9.3%	74.3%	47.3%	55.3%
1976	472	280	192	430	257	173	42	23	19	8.3%	8.2%	9.3%	78.2%	47.8%	56.6%

Source: U.S. Bureau of Labour Statistics, Geographic Profile of Employment and Unemployment

Exhibit 6: New Brunswick Labour Force Participation (thousands, annual averages)

Year	Labour Force			Employment			Unemployment			Unemployment Rate			Part. Rate		Employed/ Populatio
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Male	Female	
1985	304	177	127	258	149	109	46	28	18	15.2%	16.0%	14.2%	87.7%	46.3%	48.1%
1984	291	172	120	248	145	102	44	26	17	14.3%	15.4%	14.3%	86.0%	44.1%	46.3%
1983	290	171	118	247	145	102	43	27	16	14.8%	15.5%	13.9%	87.3%	44.2%	47.3%
1982	282	169	113	243	145	98	40	24	16	14.0%	14.2%	13.8%	87.6%	42.3%	47.2%
1981	286	172	114	253	153	100	33	19	14	11.5%	11.3%	11.3%	89.3%	43.7%	49.7%
1980	290	170	110	249	153	97	31	18	13	11.0%	10.5%	11.8%	89.1%	42.6%	49.5%
1979	273	170	103	243	153	90	30	17	13	11.1%	10.2%	12.3%	89.8%	40.9%	48.3%
1978	268	167	101	234	147	87	34	20	14	12.5%	11.8%	13.7%	89.5%	40.6%	47.9%
1977	258	164	94	224	144	80	34	20	14	13.2%	12.3%	14.7%	89.3%	38.5%	46.5%
1976	253	162	91	226	145	80	28	17	11	11.0%	10.4%	12.0%	89.7%	38.0%	47.7%
1975	248	159	89	224	145	79	24	24	10	9.8%	8.8%	11.4%	70.0%	38.0%	48.5%

Source: Statistics Canada 71-529 Occasional and 71-001

Exhibit 7: Maine Employment by Industry (thousands)

Year	Total Non-Ag.	Manu-facturing	Trade	Public Admin.	Services	Trans. & Util.	Finance	Construc-tion
1985	459	106	108	86	95	19	21	23
1984	446	110	102	84	91	19	20	19
1983	425	109	95	83	85	18	18	17
1982	416	109	91	82	82	19	18	17
1981	419	114	89	83	81	19	17	18
1980	418	113	89	83	78	19	17	20
1979	416	114	75	83	75	19	16	19
1978	405	111	89	82	70	18	16	19
1977	388	106	84	78	68	18	15	20
1976	374	102	79	75	64	18	15	22
1975	356	96	76	75	60	18	14	19

Source: U.S. Bureau of Labour Statistics, Employment and Earnings, States and Areas, 1939-78, and Supplement to Employment, Hours and Earnings, States and Areas, Data for 1980-84

Exhibit 8: New Brunswick Employment by Industry (thousands)

Year	Total Non-Ag.	Manu-facturing	Trade	Public Admin.	Services	Trans. & Util.	Finance	Construc-tion
1985	251	33	49	22	86	26	10	14
1984	241	34	48	21	79	25	10	13
1983	239	33	46	22	80	24	9	15
1982	236	33	44	21	78	26	9	14
1981	246	37	50	21	75	27	10	15
1980	243	36	47	22	75	26	11	16
1979	237	38	47	19	68	25	11	19
1978	230	38	44	19	68	25	9	18
1977	219	33	44	17	62	25	9	17
1976	220	33	44	19	59	25	9	19
1975	218	35	44	17	58	24	8	20

Source: Statistics Canada 71-529 Occasional and 71-001

Exhibit 9: Maine Personal Income Per Capita (current U.S. $)

Year	Maine	U.S.	Percent o U.S. Avg.
1984	10,849	12,789	84.8%
1983	9,946	11,690	85.1%
1982	9,315	11,113	83.8%
1981	8,643	10,544	82.0%
1980	7,756	9,494	81.7%
1979	6,693	8,651	77.4%
1978	6,297	7,772	81.0%
1977	5,768	6,984	82.6%
1976	5,334	6,367	83.8%
1975	4,746	5,842	81.2%

Source: U.S. Bureau of Economic Analysis, Survey of Current Business

Exhibit 10: New Brunswick Personal Income Per Capita (current Cdn. $)

Year	New Brunswick	Canada	Percent o Cdn. Avg.
1984	10,734	14,412	74.5%
1983	10,025	13,542	74.0%
1982	9,279	12,887	72.0%
1981	8,386	11,853	70.8%
1980	7,417	10,178	72.9%
1979	6,815	9,069	75.1%
1978	6,103	8,143	74.9%
1977	5,516	7,370	74.8%
1976	5,080	6,747	75.3%
1975	4,632	6,001	77.2%

Source: Statistics Canada 13-201 National Income and Expenditure Accounts

Exhibit 11: U.S. & Canadian Inflation Rates, Price Indexes and Exchange Rates

Year	Inflation Rate		Price Index		Exchange Rate
	U.S.	Canada	U.S.	Canada	
1985	3.5%	4.0%	100.0	100.0	$1.3652
1984	4.3%	4.4%	96.9	94.5	$1.2948
1983	3.2%	5.8%	91.3	85.3	$1.2324
1982	6.1%	10.8%	82.7	75.8	$1.2341
1981	10.4%	12.5%	72.9	68.8	$1.1990
1980	13.5%	10.2%	65.5	63.0	$1.1690
1979	11.3%	9.2%	60.8	57.9	$1.1715
1978	7.7%	8.8%	57.1	53.7	$1.1402
1977	6.5%	7.9%	53.6	49.9	$1.0635
1976	6.5%	7.5%	50.3	45.1	$0.9861
1975	6.5%	10.8%	50.3	40.6	$1.0173

Source: Statistics Canada 62-010 and
Bank of Canada Review, May 1986

Exhibit 12: Growth in Maine Population by Age Cohort (percent)

Year	Total	0-4	5-13	14-17	18-24	25-44	45-64	65+
1984	0.9%	-2.4%	7.4%	-1.3%	-2.8%	2.7%	0.9%	2.0%
1983	1.1%	1.2%	-1.3%	-1.3%	0.0%	3.5%	0.9%	1.4%
1982	0.0%	1.3%	-1.9%	-4.9%	-0.7%	2.3%	-0.5%	2.1%
1981	0.7%	1.3%	-3.1%	-3.6%	1.4%	3.0%	0.0%	2.1%
1980	2.6%	2.6%	1.9%	-1.2%	1.4%	7.5%	-2.2%	4.4%
1979	0.5%	1.3%	-3.1%	-2.3%	0.7%	2.6%	0.4%	1.5%
1978	0.6%	0.0%	-3.0%	0.0%	2.0%	2.0%	0.5%	2.3%
1977	1.4%	0.0%	-1.2%	1.2%	3.1%	3.1%	1.4%	1.6%
1976	1.0%	-3.8%	-1.8%	0.0%	2.6%	2.6%	0.9%	2.4%
Average 1976-1983	1.0%	1.1%	-1.7%	-1.8%	1.1%	3.4%	0.1%	2.2%

Source: Exhibit 1

Exhibit 13: Growth in New Brunswick Population by Age Cohort (percent)

Year	Total	0-4	5-13	14-17	18-24	25-44	45-64	65+
1983	1.1%	0.6%	-0.7%	-5.2%	1.8%	3.6%	0.7%	1.8%
1982	0.4%	-1.9%	-1.1%	-5.3%	0.5%	2.6%	0.2%	2.4%
1981	0.1%	-2.7%	-1.4%	-3.9%	-0.6%	2.4%	0.4%	2.9%
1980	0.5%	-2.0%	-1.9%	-1.3%	-1.1%	3.4%	0.3%	2.7%
1979	0.6%	-1.6%	-2.9%	-0.3%	0.0%	3.5%	0.1%	3.1%
1978	0.6%	-1.9%	-2.4%	-0.2%	0.4%	3.0%	0.5%	2.9%
1977	1.0%	-1.0%	-2.1%	0.2%	1.6%	3.2%	0.9%	3.1%
Average 1976-1983	0.6%	-1.5%	-1.8%	-2.3%	0.4%	3.1%	0.4%	2.7%

Source: Exhibit 2

Exhibit 14: Growth in Maine Labour Force Participation (percent)

Year	Labour Force Total	Labour Force Male	Labour Force Female	Employment Total	Employment Male	Employment Female	Unemployment Total	Unemployment Male	Unemployment Female	Unemployment Rate Total	Unemployment Rate Male	Unemployment Rate Female	Part. Rate Male	Part. Rate Female	Employed/ Population
1985	0.0%	1.0%	-1.2%	0.0%	1.8%	-0.4%	-11.8%	-21.1%	0.0%	-11.5%	-16.4%	-4.8%	0.3%	-2.3%	-0.1%
1984	2.8%	0.7%	5.5%	6.1%	4.4%	8.3%	-29.2%	-29.6%	-28.6%	-32.2%	-33.7%	-23.5%	0.7%	3.0%	4.4%
1983	4.3%	2.0%	7.2%	3.8%	1.5%	6.9%	9.1%	8.0%	10.5%	4.7%	7.0%	3.5%	0.4%	5.8%	2.3%
1982	1.2%	0.7%	1.8%	-0.4%	-1.5%	1.0%	18.9%	25.0%	11.8%	13.4%	20.4%	7.6%	0.4%	0.8%	-1.1%
1981	1.8%	2.5%	0.9%	2.4%	2.6%	2.0%	-5.1%	-4.8%	-5.6%	-5.5%	-5.9%	-6.0%	-1.5%	-0.6%	-0.2%
1980	2.2%	1.1%	3.9%	1.5%	0.8%	2.6%	11.4%	10.5%	12.5%	6.3%	5.9%	9.1%	0.4%	1.4%	0.2%
1979	3.4%	0.4%	7.3%	2.3%	-0.8%	6.7%	20.7%	18.9%	23.1%	17.4%	21.4%	13.2%	-0.9%	4.0%	0.5%
1978	0.6%	1.1%	0.5%	3.3%	3.1%	2.9%	-25.6%	-27.3%	-27.8%	-27.0%	-27.3%	-26.9%	-0.8%	0.8%	1.7%
1977	-0.4%	-0.7%	0.0%	0.0%	0.0%	0.6%	-7.1%	-4.3%	-5.3%	-5.5%	-6.3%	-6.0%	-4.2%	-1.0%	-2.2%
Average 1976-1985	1.8%	1.0%	2.8%	2.2%	1.3%	3.4%	-3.7%	-4.5%	-2.6%	-5.4%	-5.2%	-5.6%	-0.6%	1.2%	0.6%

Source: Exhibit 5

Exhibit 15: Growth in New Brunswick Labour Force Participation (percent)

Year	Labour Force Total	Labour Force Male	Labour Force Female	Employment Total	Employment Male	Employment Female	Unemployment Total	Unemployment Male	Unemployment Female	Unemployment Rate Total	Unemployment Rate Male	Unemployment Rate Female	Part. Rate Male	Part. Rate Female	Employed/ Population
1985	4.5%	2.9%	5.8%	4.0%	2.8%	6.3%	4.5%	7.7%	5.9%	2.0%	3.3%	-0.7%	2.6%	5.0%	2.6%
1984	0.3%	0.6%	1.7%	0.4%	0.0%	0.0%	2.3%	-3.7%	6.3%	0.7%	-0.6%	3.6%	-1.3%	-0.2%	-0.6%
1983	2.8%	1.2%	4.4%	1.6%	0.0%	4.1%	7.5%	12.5%	0.0%	5.7%	9.2%	0.0%	-0.4%	3.0%	0.0%
1982	-1.4%	-1.7%	-0.9%	-4.0%	-5.2%	-2.0%	21.2%	26.3%	14.3%	21.7%	25.7%	16.0%	-2.5%	-1.8%	-5.0%
1981	2.1%	1.2%	3.6%	1.6%	0.0%	3.1%	6.5%	5.6%	7.7%	4.5%	7.6%	0.8%	0.3%	2.6%	0.4%
1980	2.6%	0.0%	6.8%	2.5%	0.0%	7.8%	3.3%	5.3%	0.0%	-0.9%	2.9%	-5.6%	-1.0%	4.4%	1.2%
1979	1.9%	1.8%	2.0%	3.8%	4.1%	3.4%	-11.8%	-15.0%	-7.1%	-11.2%	-13.6%	-8.8%	0.4%	0.5%	2.1%
1978	3.9%	1.8%	7.4%	4.5%	2.1%	8.8%	0.0%	0.0%	0.0%	-5.3%	-4.1%	-6.8%	0.3%	5.5%	3.0%
1977	2.0%	1.2%	3.3%	-0.9%	-0.7%	0.0%	21.4%	17.6%	27.3%	20.0%	18.3%	22.5%	-0.6%	1.3%	-2.5%
Average 1976-1985	2.1%	1.0%	3.8%	1.5%	0.3%	3.5%	5.7%	5.7%	5.6%	3.7%	4.9%	1.9%	-0.3%	2.2%	0.1%

Source: Exhibit 6

Exhibit 16: Growth in Maine Employment by Industry (percent)

Year	Total Non-Ag.	Manu-facturing	Trade	Public Admin.	Services	Trans. & Util.	Finance	Construc-tion
1985	3.1%	-3.8%	6.2%	2.3%	5.3%	0.0%	6.6%	18.0%
1984	4.8%	1.1%	8.0%	1.1%	7.0%	4.9%	8.3%	14.8%
1983	2.3%	0.6%	4.4%	1.2%	3.8%	-0.5%	3.4%	1.2%
1982	-0.9%	-4.3%	1.2%	-0.6%	1.2%	-1.1%	2.9%	-4.6%
1981	0.2%	0.3%	0.6%	-0.8%	2.9%	0.0%	3.0%	-10.3%
1980	0.6%	-0.7%	18.5%	0.4%	4.3%	-1.6%	3.1%	2.6%
1979	2.7%	2.7%	-16.0%	1.8%	6.7%	5.0%	1.3%	-0.5%
1978	4.4%	4.8%	6.8%	4.9%	4.1%	0.6%	3.3%	-3.5%
1977	3.7%	3.8%	5.6%	3.3%	5.8%	0.6%	4.8%	-10.4%
1976	5.1%	6.3%	4.6%	0.5%	7.0%	1.1%	2.8%	18.8%
Average 1975-1985	2.6%	1.0%	3.7%	1.4%	4.8%	0.9%	3.9%	2.1%

Source: Exhibit 7

Exhibit 17: Growth in New Brunswick Employment by Industry (percent)

Year	Total Non-Ag.	Manu-facturing	Trade	Public Admin.	Services	Trans. & Util.	Finance	Construc-tion
1985	4.1%	-2.9%	2.1%	4.8%	8.9%	4.0%	0.0%	7.7%
1984	0.8%	3.0%	4.3%	-4.5%	-1.3%	4.2%	11.1%	-13.3%
1983	1.3%	0.0%	4.5%	4.8%	2.6%	-7.7%	0.0%	7.1%
1982	-4.1%	-10.8%	-12.0%	0.0%	4.0%	-3.7%	-10.0%	-6.7%
1981	1.2%	2.8%	6.4%	-4.5%	0.0%	3.8%	-9.1%	-6.3%
1980	2.5%	-5.3%	0.0%	15.8%	10.3%	4.0%	0.0%	-15.8%
1979	3.0%	0.0%	6.8%	0.0%	0.0%	0.0%	22.2%	5.6%
1978	5.0%	15.2%	0.0%	11.8%	9.7%	0.0%	0.0%	5.9%
1977	-0.5%	0.0%	0.0%	-10.5%	5.1%	0.0%	0.0%	-10.5%
1976	0.9%	-5.7%	0.0%	11.8%	1.7%	4.2%	12.5%	-5.0%
Average 1975-1985	1.4%	-0.6%	1.1%	2.6%	4.0%	0.8%	2.3%	-3.5%

Source: Exhibit 8

Exhibit 18: Maine Personal Income
Per Capita (constant U.S. 1985$)

Year	Total	Index (1976=100)
1984	11,196	99.3%
1983	10,890	96.6%
1982	11,260	99.9%
1981	11,858	105.2%
1980	11,844	105.1%
1979	11,008	97.6%
1978	11,029	97.8%
1977	10,760	95.4%
1976	10,597	94.0%
1975	9,429	83.6%

Source: Exhibits 9 and 11

Exhibit 19: New Brunswick Personal I
Per Capita (constant Cdn 1985$)

Year	Total	Index (1976=100)
1984	11,357	100.7%
1983	11,752	104.2%
1982	12,237	108.6%
1981	12,187	108.1%
1980	11,771	104.4%
1979	11,767	104.4%
1978	11,370	100.9%
1977	11,048	98.0%
1976	11,273	100.0%
1975	11,399	101.1%

Source: Exhibits 10 and 11

Exhibit 20: Maine and New Brunswick Personal Income Per Capita (constant Cdn 1985$)

Year	New Brunswick	Maine	N.B. as % of Maine
1984	$11,357	$14,497	78.3%
1983	$11,752	$14,101	83.3%
1982	$12,237	$14,580	83.9%
1981	$12,187	$15,354	79.4%
1980	$11,771	$15,335	76.8%
1979	$11,767	$14,253	82.6%
1978	$11,370	$14,281	79.6%
1977	$11,048	$13,932	79.3%
1976	$11,273	$13,721	82.2%
1975	$11,399	$12,208	93.4%

Source: Exhibits 10 and 11

Exhibit 21: Index of Maine Population by Age Cohort (1976=100)

Year	Total	0-4	5-13	14-17	18-24	25-44	45-64	65+
1984	108.0	105.3	95.2	87.2	105.1	129.7	101.4	118.8
1983	107.1	107.9	88.7	88.4	108.1	126.2	100.5	116.4
1982	105.9	106.6	89.9	89.5	108.1	122.0	99.5	114.8
1981	105.9	105.3	91.7	94.2	108.9	119.3	100.0	112.5
1980	105.1	103.9	94.6	97.7	107.4	115.8	100.0	110.2
1979	102.5	101.3	92.9	98.8	105.9	107.8	102.3	105.5
1978	102.0	100.0	95.8	101.2	105.1	105.1	101.8	103.9
1977	101.4	100.0	98.8	101.2	103.1	103.1	101.4	101.6
1976	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1975	99.0	103.9	101.8	100.0	97.4	97.4	99.1	97.7

Source: Exhibit 1

Exhibit 22: Index of New Brunswick Population by Age Cohort (1976=100)

Year	Total	0-4	5-13	14-17	18-24	25-44	45-64	65+
1983	104.4	89.9	88.2	84.8	102.7	123.8	103.2	120.5
1982	103.2	89.4	88.8	89.5	100.9	119.5	102.5	118.3
1981	102.8	91.1	89.8	94.5	100.3	116.5	102.3	115.5
1980	102.7	93.7	91.1	98.3	101.0	113.7	101.8	112.3
1979	102.2	95.5	92.8	99.7	102.0	110.0	101.5	109.3
1978	101.6	97.1	95.6	100.0	102.0	106.3	101.4	106.1
1977	101.0	99.0	97.9	100.2	101.6	103.2	100.9	103.1
1976	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Exhibit 2

Exhibit 23: Index of Maine Labour Force Participation (1976=100)

Year	Labour Force Total	Labour Force Male	Labour Force Female	Employment Total	Employment Male	Employment Female	Unemployment Total	Unemployment Male	Unemployment Female	Unemployment Rate Total	Unemployment Rate Male	Unemployment Rate Female	Part. Rate Male	Part. Rate Female	Employed/ Populatio
1985	116.9	108.9	128.6	121.4	112.5	134.7	71.4	65.2	78.9	60.7	62.1	59.6	94.8	111.5	102.5
1984	116.9	107.9	130.2	120.5	110.5	135.3	81.0	82.6	78.9	68.6	74.3	62.7	94.5	114.9	102.7
1983	113.8	107.1	123.4	113.5	105.8	124.9	114.3	117.4	110.5	101.1	112.0	98.9	93.9	111.5	101.2
1982	109.1	105.0	115.1	102.3	104.3	116.8	104.8	108.7	100.0	96.6	104.7	95.9	93.5	105.4	98.9
1981	107.8	104.3	113.0	109.8	105.8	115.6	88.1	87.0	89.5	80.9	81.6	79.8	93.1	104.6	100.0
1980	105.9	101.8	112.0	107.2	103.1	113.3	92.9	91.3	94.7	86.5	87.7	84.9	94.5	105.2	100.2
1979	103.6	100.7	107.8	105.6	102.3	110.4	83.3	82.6	84.2	80.9	82.8	77.8	94.1	103.8	100.0
1978	100.2	100.4	100.5	103.3	103.1	103.5	69.0	69.6	68.4	68.9	68.2	68.7	95.0	99.8	99.5
1977	99.6	99.3	100.0	100.0	100.0	100.6	92.9	95.7	94.7	94.4	93.7	94.0	95.8	99.0	97.8
1976	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Exhibit 5

Exhibit 24: Index of New Brunswick Labour Force Participation (1976=100)

Year	Labour Force Total	Labour Force Male	Labour Force Female	Employment Total	Employment Male	Employment Female	Unemployment Total	Unemployment Male	Unemployment Female	Unemployment Rate Total	Unemployment Rate Male	Unemployment Rate Female	Part. Rate Male	Part. Rate Female	Employed/ Populatio
1985	120.2	109.3	139.6	114.2	102.8	136.3	164.3	164.7	163.6	139.2	153.8	110.3	97.1	121.8	100.9
1984	115.0	106.2	131.9	109.7	100.0	127.5	157.1	152.9	154.5	135.5	148.1	113.2	94.7	116.1	98.3
1983	114.5	105.6	129.7	109.3	100.0	127.3	153.6	150.8	145.5	134.5	143.0	115.0	96.5	116.3	99.0
1982	111.5	104.3	124.2	107.5	100.0	122.5	142.9	141.2	145.5	127.3	136.5	115.0	97.0	112.9	99.0
1981	113.0	106.2	125.3	111.9	105.5	125.0	117.9	111.8	127.3	104.5	108.7	99.2	99.4	115.0	104.2
1980	110.7	104.9	120.9	110.2	105.5	121.3	110.7	105.9	118.2	100.0	101.8	98.1	99.1	112.1	103.3
1979	107.3	104.3	113.2	107.5	105.5	112.5	107.1	100.0	118.2	100.9	98.1	104.2	100.1	107.4	102.5
1978	105.3	103.1	111.0	103.5	101.4	108.8	121.4	117.6	127.3	113.6	113.5	114.2	99.7	106.8	100.4
1977	102.0	101.2	103.3	99.1	99.3	100.0	121.4	117.6	127.3	120.0	118.3	122.5	99.4	101.3	97.5
1976	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1975	98.0	98.1	97.8	93.1	100.0	98.8	85.7	141.2	90.9	89.1	84.6	95.0	100.4	100.0	101.7

Source: Exhibit 6

Exhibit 25: Index of Maine Employment by Industry (1976=100)

Year	Total Non-Ag.	Manu-facturing	Trade	Public Admin.	Services	Trans. & Util.	Finance	Construc-tion
1985	122.8	104.1	136.9	114.2	149.4	107.8	143.2	103.6
1984	119.1	108.2	128.9	111.7	141.8	107.8	134.2	87.8
1983	113.6	107.1	119.3	110.5	132.6	102.8	124.0	76.5
1982	111.1	106.5	114.3	109.2	127.7	103.4	119.9	75.6
1981	112.1	111.3	112.9	109.8	126.2	104.5	116.4	79.2
1980	111.8	111.0	112.2	110.8	122.6	104.5	113.0	88.2
1979	111.2	111.8	94.7	110.4	117.6	106.1	109.6	86.0
1978	108.3	108.8	112.8	108.4	110.2	101.1	108.2	86.4
1977	103.7	103.8	105.6	103.3	105.8	100.6	104.8	89.6
1976	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1975	95.2	94.1	95.6	99.5	93.4	98.9	97.3	84.2

Source: Exhibit 7

Exhibit 26: Index of New Brunswick Employment by Industry (1976=100)

Year	Total Non-Ag.	Manu-facturing	Trade	Public Admin.	Services	Trans. & Util.	Finance	Construc-tion
1985	114.1	100.0	111.4	115.8	145.8	104.0	111.1	73.7
1984	109.5	103.0	109.1	110.5	133.9	100.0	111.1	68.4
1983	108.6	100.0	104.5	115.8	135.6	96.0	100.0	78.9
1982	107.3	100.0	100.0	110.5	132.2	104.0	100.0	73.7
1981	111.8	112.1	113.6	110.5	127.1	108.0	111.1	78.9
1980	110.5	109.1	106.8	115.8	127.1	104.0	122.2	84.2
1979	107.7	115.2	106.8	100.0	115.3	100.0	122.2	100.0
1978	104.5	115.2	100.0	100.0	115.3	100.0	100.0	94.7
1977	99.5	100.0	100.0	89.5	105.1	100.0	100.0	89.5
1976	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1975	99.1	106.1	100.0	89.5	98.3	96.0	88.9	105.3

Source: Exhibit 8

Exhibit 27: U.S. and Canadian Unemployment Rates

Year	-- Unstandardized -- U.S.	Canada	-- Standardized -- U.S.	Canada	-- Difference -- U.S.	Canada
1983	9.7%	11.0%	9.5%	10.9%	0.2%	0.1%
1982	7.6%	7.5%	7.5%	7.5%	0.1%	0.0%
1981	7.1%	7.5%	7.0%	7.5%	0.1%	0.0%
1980	5.8%	7.4%	5.7%	7.4%	0.1%	0.0%
1979	6.0%	8.3%	5.9%	8.3%	0.1%	0.0%
1978	7.0%	8.1%	6.9%	8.0%	0.1%	0.1%
1977	7.7%	7.1%	7.5%	7.1%	0.2%	0.0%
1976	8.5%	6.9%	8.3%	6.9%	0.2%	0.0%

Source: Organisation for Economic Co-operation and Development, Economic Outlook; Bureau of Labour Statistics, Employment and Earnings; and Statistics Canada 71-529 Occasional

Exhibit 28: Distribution of Maine Employment by Industry (percent)

Year	Total Non-Ag.	Manu-facturing	Trade	Public Admin.	Services	Trans. & Util.	Finance	Construc-tion
1985	100.0%	23.1%	23.6%	18.7%	20.8%	4.2%	4.6%	5.0%
1984	100.0%	24.8%	22.9%	18.9%	20.3%	4.3%	4.4%	4.4%
1983	100.0%	25.7%	22.2%	19.6%	19.3%	4.3%	4.3%	4.0%
1982	100.0%	26.1%	21.8%	19.8%	19.6%	4.5%	4.2%	4.0%
1981	100.0%	27.1%	21.3%	19.7%	19.2%	4.5%	4.1%	4.2%
1980	100.0%	27.1%	21.3%	19.9%	18.7%	4.5%	3.9%	4.7%
1979	100.0%	27.4%	18.0%	20.0%	18.0%	4.6%	3.8%	4.6%
1978	100.0%	27.4%	22.0%	20.1%	17.4%	4.5%	3.9%	4.7%
1977	100.0%	27.3%	21.5%	20.0%	17.4%	4.6%	3.9%	5.1%
1976	100.0%	27.3%	21.2%	20.1%	17.1%	4.8%	3.9%	5.9%
1975	100.0%	27.0%	21.3%	21.0%	16.7%	5.0%	4.0%	5.2%

Source: Exhibit 7

Exhibit 29: Distribution of New Brunswick Employment by Industry (percent)

Year	Total Non-Ag.	Manu-facturing	Trade	Public Admin.	Services	Trans. & Util.	Finance	Construc-tion
1985	100.0%	13.1%	19.5%	8.8%	34.3%	10.4%	4.0%	5.6%
1984	100.0%	14.1%	19.9%	8.7%	32.8%	10.4%	4.1%	5.4%
1983	100.0%	13.8%	19.2%	9.2%	33.5%	10.0%	3.8%	6.3%
1982	100.0%	14.0%	18.6%	8.9%	33.1%	11.0%	3.8%	5.9%
1981	100.0%	15.0%	20.3%	8.5%	30.5%	11.0%	4.1%	6.1%
1980	100.0%	14.8%	19.3%	9.1%	30.9%	10.7%	4.5%	6.6%
1979	100.0%	16.0%	19.8%	8.0%	28.7%	10.5%	4.6%	8.0%
1978	100.0%	16.5%	19.1%	8.3%	29.6%	10.9%	3.9%	7.8%
1977	100.0%	15.1%	20.1%	7.8%	28.3%	11.4%	4.1%	7.8%
1976	100.0%	15.0%	20.0%	8.6%	26.8%	11.4%	4.1%	8.6%
1975	100.0%	16.1%	20.2%	7.8%	25.6%	11.0%	3.7%	9.2%

Source: Exhibit 8